

OUTLINE OF THE FIVE YEAR PLAN FOR PRODUCTION
OF WAR MATERIALS

MILITARY SECRET

WAR OFFICE
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Preface

1.) This outline, whose two primary objects lie in the perfection of war preparations simultaneously with the realization of the 5 Year Plan for Major Industries, has been drafted with the purpose of unifying the Army's policies principally within the sphere of handling of matters by military administration, in regard to the expansion, cultivation and control, etc., of munition industries so as to ensure perfection in the wartime supply of principal war materials.

2.) Such factors as funds, raw materials, materials, fuel, machinery, labor, technic, motive power and transportation, etc., that are likely to crop up in connection with the realization of this outline, shall be merged into the afore-mentioned Outline of the 5 Year Plan for Major Industries.

In addition to this, as for the aircraft industry and automobile industry, they have been classified under the scope of the synthetic national policy due to there being so many requiring disposition by national measures. However, those deemed especially necessary under the respective related items have been inserted, also, in this Outline in order to regulate the Army's policies. This applies, also, to the machine industry.

3.) The term "munition industries" in this Outline refers not only to industries engaged in the manufacture or repair of finished goods or parts for war purposes, but applies also to vital raw material industries.

Furthermore, where necessary, the policies towards industries to be converted into the aforementioned industries in time of war have also been made expressly clear in this Outline.

4.) From the standpoint of controlling the pace of its execution, this Outline shall depend firstly on the basis of the fixed war budget.

On measures planned outside of the aforementioned basis, special attention should be paid so as to avoid any confusion in regard to their description.

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I. POLICY

In order to cope with the present situation and to establish the foundation of our national defense powers accompanying the perfection of armaments, it has been planned to carry out a speedy epoch-making expansion of war industries and to exercise the necessary control over them from the standpoint of national defense.

For this purpose, special stress will be laid on accomplishing the following purposes generally by the end of the 1941 fiscal year, and the operation of Japan's economy will be made to develop rationally by unifying the handling of affairs by military administration as well as maintaining a close contact with the synthetic national policy.

- (1) Wholesale strengthening of the productive power of all war material industries as well as of all major industries which can be converted in wartime, in Japan and Manchuria.

Especially the moving of all these industries to Manchuria, Korea and other parts of the Continent.

- (2) Accelerating the establishment of a plan of self-sufficiency in raw materials, materials and fuel in Japan, Manchuria and North China.
- (3) Hurrying up the control of war material industries, having in mind the conversion from a peacetime basis to a wartime basis.

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II General Plan

1. It is planned to expand and cultivate the munitions industries (including parts and raw materials industries) as well as the various industries to be converted in time of war simultaneously with the expansion of the major national defense industries and to strengthen the necessary control.

2. The emphasis of expansion is to be placed on the production of airplanes, arms and ammunition, tanks and military vehicles, which are the main factors for constituting fighting power, and on others directly connected to this.

In regard to the expansion of the airplane industry in particular, the utmost effort will be exerted toward it to guide it speedily and rapidly.

3. The objective of expansion will be based on the sufficiency of the war time supply requirements.

For this purpose, the expansion of industries manufacturing genuine munitions other than airplanes and automobiles will be guided by military administration measures with perfection of materials accompanying the repletion of armaments as the yardstick for the time being and in regard to the shortages from the standpoint of meeting the wartime demands, the necessary military administration measures will be devised to accelerate the development of various industries to be converted in time of war through the comprehensive national policy as well as for the purpose of preparing for wartime conversion.

In regard to airplane industry, it will be guided toward active expansion so as to be able to comply with the realization of the gigantic perfection plan aiming for the creation of an invincible airforce and the national aviation policy based on the comprehensive national policy without a moment's delay, although the primary aim will at first be to adapt it to the fixed repletion of armaments /plan/.

In regard to the automobile industry, those in the category of genuine war supplies such as tanks and special military vehicles will be governed by the foregoing Clause 2, but in regard to ordinary automobiles, it will be guided by the comprehensive national policy in such a way as not to impede the commandeering and supplying of the required number in time of war. However, necessary military administration measures will be devised to have a considerable portion of the wartime capacity of the said industry cooperate in the wartime production of airplanes.

4. The areas of expansion will be both Japan and Manchoukuo and their field of operation will be determined roughly as follows:

(a) In regard to the continent, particularly Manchuria, local production of airplanes, arms and ammunition, tanks and military vehicles will be started in connection with the development of raw materials and

resources and gradually developed to make possible mass production in time of war.

(b) In regard to the expansion in Japan proper, it will be made to correlate and correspond with the previous clause, but it will be especially guided so as to meet the urgent needs. However, the degree of expansion will be appropriately regulated and the establishment of new or expanded plants on the continent will be facilitated.

(c) Although profound consideration will be given in regard to allocation of the right industry in the right place and to mutual relief of economic disadvantages throughout Japan and Manchoukuo, emphasis will be laid to unify them according to the viewpoint constituting Japan and Manchoukuo as one and to the wartime needs as much as possible.

5. Cultivation will depend primarily on the proper use of successive war budgets.

Consequently, in determining the usage of the budget, careful consideration will be given to the point of taking wartime into consideration insofar as it does not interfere with the original purpose of the budget. However, in regard to those especially necessary, every effort will be made to devise subsidy measures. Especially, drafts of planned outlays extending over several years will be drawn whenever necessary and government-managed ordnance institutions and civilian munition industries will be directed according to this.

6. The underlying principle of control will be to meet the requirements of national defense.

For this purpose, the emphasis of control will be placed on the positive expansion of such industries and their advancement into the continent and necessary measures will be devised to ensure proper and smooth execution of the mobilization, with special care being given not to cause any failure of enterprises through unnecessary feeling of uneasiness and fear on the part of businessmen.

7. In regard to matters requiring collaboration with the Navy for adjustment, special conciliatory policy will be devised.

III Outline of Expansion

1. Building-up on the continent.

1. In the 5 year Industrial Plan of Manchoukuo, proper guidance will be given to the group of war industries such as airplanes, arms and automobiles and in addition to increasing and strengthening the national defense value of this plan, the establishment of industries for the manufacture of

resources and gradually developed to make possible mass production in time of war.

(b) In regard to the expansion in Japan proper, it will be made to correlate and correspond with the previous clause, but it will be especially guided so as to meet the urgent needs. However, the degree of expansion will be appropriately regulated and the establishment of new or expanded plants on the continent will be facilitated.

(c) Although profound consideration will be given in regard to allocation of the right industry in the right place and to mutual relief of economic disadvantages throughout Japan and Manchoukuo, emphasis will be laid to unify them according to the viewpoint constituting Japan and Manchoukuo as one and to the wartime needs as much as possible.

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necessary parts and raw materials will be encouraged and various machine tool industries convertible into these in time of war will be cultivated.

Accompanying the carrying out of the economic development of Korea, efforts will be exerted towards the promotion of major industries according to the preceding paragraph.

2. Government-managed arsenals will be newly established or enlarged as a nucleus for the guidance of war industries in Manchoukuo and Korea.

3. As for the war industries in Manchoukuo and Korea and others convertible into these in time of war, emphasis will be laid on Southern Manchuria and Northern Korea, in particular, from a military point of view and for the present, guidance will be so given as to have these established in the following areas:

- a. The zone comprising Mukden, Liaoyang, Anshan, Fushun and Penhsihu.
- b. The zone centering around the neighboring area of Dairen.
- c. The zone extending to Heijo (Pingyang) and Shingishu.

In addition to the above, however, the creation of such industrial zone within the Tungpin-Tao District will be considered depending on its future development. Furthermore, the cultivation of war industries may be undertaken, if necessary, even in the industrial zone of Eastern and Northern Korea. Facilities within the industrial zones and areas will be suitably dispersed as a precaution against air raids.

4. Relative to the setting-up of industrial zones in Manchoukuo and Korea, consideration will be sought for the gradual realization of the following transportation facilities:

- a. For Mukden-Anshan Zone--Improvement of water transportation facilities on the Taitzu-ho, Hun-he and Liao-ho and reconstruction of Yingkow Harbor.
- b. For Tungpin-Tao District --(Construction of harbor at Toshihtao (and a railway leading to it.
- c. For Northern Korea Zone -- (Construction of a railway interlinking (with the eastern shores of Northern Korea industrial zone.

5. Maximum effort will be exerted toward overcoming the various factors impeding the speedy construction of the war industries in Manchoukuo and others convertible in time of war.

For this purpose, attention will be given to the following items:

- a. Absorption and acquisition of capital.
- b. Acquisition of technique and labor.
- c. Adjustment of both munition and civilian demand industries and preparation for conversion into wartime production.
- d. Elimination of lags within the various related industries.
- e. Counter-measures against depression and development of export measures.
- f. System and organization of enterprises.
- g. Cultivation and protection.

2. Expansion in Japan Proper

1. In regard to armament industries (including tanks and special military vehicles) and industries manufacturing related parts and raw materials, they will be privately shown the estimated orders for over several years from time to time within the scope of not hampering the preparations suitable to the immediate situation in the future and will be guided toward rapid expansion with the supply of capital being made smooth.

In regard to airplane industries and industries manufacturing related parts and raw materials, they will be guided toward expansion for the time being according to the preceding paragraph in order to meet the urgent demands from the standpoint of peace time arrangement of military materials accompanying the repletion of armaments. However, large scaled expansion carried out according to the national policy will be considered. In regard to the expansion of automobile industry, the application of the Automobile Manufacturing Enterprise Law will be relied upon and the Military Automobile Subsidy Law will be utilized.

2. Even in regard to machine tool, metallic and chemical industries, which, accompanying the repletion of armaments, are to be partially used for the manufacture of munitions, paragraph 1 of the preceding article will be applied.

3. In regard to the various industries to be converted into manufacturing munitions in time of war, promotion of industries, in general, will be relied upon, but the army will do its utmost to transplant and cultivate the necessary technique as impartially as possible and prepare them for wartime use.

3. Objectives of Expansion and Japan and Manchoukuo's Quota.

1. The standard for the conversion of peace and wartime production to be considered for the determination of the objectives of expansion of munition industries and the standard for distribution of production for the production of munition in peacetime are as shown in Appendix #1.

2. The general outline for estimating the objectives of expansion of munition industries is as shown in Appendix #2.

3. The objectives of expansion for industries manufacturing munitions throughout Japan and Manchoukuo are generally as follows; in cases where the annual schedule is not listed, the objectives are to be obtained by the end of 1941.

a. Airplane industry (including industries manufacturing parts and special raw materials)

Installation capacity is to be roughly doubled during 1938.

Subsequent expansion will conform to the national aviation policy to be handled as the comprehensive national policy and the new aviation repletion expected to be realized in addition to the already determined repletion of armaments, particularly looking forward to the epochal expansion of installation capacity. (The above mentioned national policy provides for an installation capacity ensuring a peace-time production of 10,000 planes through a protective policy and for a standing strength of 2,000 civilian airplanes). Even if the above listed national aviation policy is not realized quickly, the installation capacity will at least be tripled by about 1939.

The basis for estimating the objectives of expansion is as shown in Appendix #3.

b. Arms and ammunition industry (including industries manufacturing parts and special raw materials)

1. Arms industry.

In addition to strengthening the government institutions, civilian installation capacity will be quadrupled by about 1939.

Moreover, in regard to the preparations for wartime conversion through training request, the scope of technical cultivation for 1936 will be gradually widened to about three times by 1941.

The basis for estimating the objectives of expansion is as shown in Appendix No. 4.

3. Ammunition industry (including bombs)

In regard to government institutions, emphasis will be laid on strengthening those in Manchoukuo and Korea and in regard to civilian institutions, their lathe installation capacity will be increased about sevenfold by 1941 with special type companies, in particular, being made to install the necessary drilling equipment and to make appropriate expansion even in regard to gun-powder and explosives.

Moreover, in regard to the preparations for wartime conversion through education and request, the scope of technical cultivation for 1936 will be gradually widened to about three times by 1941.

The basis for estimating the objectives of expansion (for only lathe) is as shown in Appendix #5.

c. Tank industry (including armored cars).

The installation capacity will be increased two and a half times by 1939.

The basis for estimating the objectives of expansion is as shown in Appendix #6.

d. Arms industry, in general.

Practically the same as the previous clause.

4. The objectives of expansion of major industries convertible into industries for the manufacture of munitions in time of war throughout Japan and Manchoukuo are as follows:

a. Machine tool industry (excluding construction machinery industry)

Although they will be steadily expanded according to the peacetime production conversion of already existing industries through arrangement of materials accompanying the promotion of industries, in general, based on the comprehensive national policy, and the repletion of armaments, but their installation capacity will be increased two to three-fold by about the end of 1941 through the comprehensive national policy.

b. Metal industry (including a portion of the parts industry)

In regard to special raw material industry and parts industry connected with munition it is the same as the previous clause.

In regard to other metal industries, in general, they will be dealt according to a separate plan for the comprehensive national policy.

c. Automobile industry, in general (including parts industry).

Excluding the miniature-sized cars, the number of cars for peacetime will be 300,000 (including 150,000 trucks) and the comprehensive national policy aiming for a yearly production of 100,000 in peacetime will be relied upon.

d. Construction machinery industry.

Through the comprehensive national policy, the annual production will be made to reach about 50,000 units in peacetime.

5. The objectives of expansion for industries manufacturing munitions in Manchoukuo will be as follows:

In all cases where the dates are not specifically expressed, the objective is to be reached by the end of 1941.

a. Airplane industry (including parts and special raw materials industry)

With the undertaking starting from 1937, an airplane industry with a wartime capacity for producing 600 planes annually will be constructed. In addition to the above, they will be further guided toward positive expansion so as to comply with the realization of the new aviation repletion plan apart from the national aviation policy based on the comprehensive national policy and the already determined repletion of armaments and in the event Japan and Manchoukuo retain an installation capacity capable of meeting an annual production of 10,000 planes in peacetime, Manchoukuo's goal will be about 3,000 planes.

b. Arms industry (same as above) and converted wartime industries.

The objective will be to meet on the spot the requirements of the supply depots supplying ten divisions organized on war footing.

However, the Mukden Arsenal will be cultivated by the continuous war budget by the end of 1941 and aside from those of special nature, it will be possible to meet 70 per cent of the objectives as indicated in the preceding paragraph. In regard to deficiency toward achieving the objectives mentioned previously, guidance will be given to the machine tool industries expected to spring up through the Manchurian 5 year industrial plan and they will be prepared for wartime conversion.

c. Ammunition industry (same as above) and converted wartime industries.

Starting the undertaking from 1938, the objective will be to establish government arsenals and to ensure the supply of various types of shells sufficiently to the ten divisions on war footing and the supply of bombs to a considerably powerful air force by the last fiscal year of the continuous war budget.

However, provided that there be no change in the military budget, about one-third of the government installations mentioned above will be completed by the end of 1941 and combining the capacity of Mukden Arsenal and the civilian industries cultivated by the military budget, a war time capacity of roughly over one-half (a greater part in some items) of the objective mentioned previously will be attained. In regard to the deficiency toward achieving the objectives mentioned in the preceding paragraph for the said year, guidance will be given to the machine tool industries expected to spring up through the Manchurian 5 year industrial plan and they will be prepared for wartime conversion.

Moreover, in the event of the outbreak of hostilities during that said year, special measures for the rapid replenishment of equipment will be devised.

d. Gunpowder and explosive industry.

Aside from government installations, the required capacity will be set up as a means to meet the demand for ammunition and bombs, mentioned in the two previous clauses, through the appropriate use of the substitute chemicals of Manchoukuo and Korea.

4. Tanks (including armored cars) industry (including parts industry).

A wartime monthly production of about 30 cars will be attained as quickly as possible through installations added to government arsenals and the guidance of civilian industrialists to advance into Manchoukuo and this will be increased to a monthly production of 50 cars with the progress of the Manchurian 5 year industrial plan.

f. Automobile industry (including parts industry).

As her quota in the automobile policy within the comprehensive national policy, Manchoukuo's annual passenger production will be expected to be 10,000 cars.

g. General utensils, food and clothing industries.

They will be appropriately expanded.

h. The standard of production items and quantity of war supplies to be expected of Manchoukuo during 1942 will roughly be as shown in Appendix #7.

A general view of the field of production of Japan and Manchoukuo for the production of war supplies is as shown in Appendix #8.

IV. Outline of Cultivation.

1. For the improvement of the munition mobilization capacity, arrangements will be made as quickly as possible, a five year plan will be established and the basic principle for the cultivation of the munition industries will be regulated according to the following points:

a. Aside from those deemed necessary or advantageous to rely on government-controlled institutions, the emphasis for the supplying of war materials will be directed toward civilian factories.

b. Efforts will be made to establish new factories.

c. Although the expansion of large industries is necessary, efforts will be made to cultivate medium and small-sized industries as far as circumstances permit.

d. In addition to the proper application of the training request system, the existing accounting law will be revised in view of the specific nature of the supplying of war materials so as to expedite the prosecution of the army's plan in regard to the cultivation of industries manufacturing war materials.

e. The development of enterprises will be facilitated by contracting for the supplying of war materials over a long period and, if necessary, opening the way to make payments in advance.

f. In regard to production quota, plans will be made to have it agree as much as possible in substance with that of the wartime plan.

g. The unification of supplying duties will be further strengthened.

Especially, efforts will be made to mollify the regulations pertaining to unified acquisition and trusteeship in the wartime plan for peacetime use.

h. Outside of those which must be specially imported to meet urgent requirements, home industries will be strongly encouraged.

V. Outline of Control.

1) As regards the controlling of war material industries, perfection will be sought in regard to removing the various factors likely to impede wartime expansion, in view of the special characteristics of these industries, especially the characteristic of the demands in wartime and those in peacetime having a wide difference.

In this instance, every effort will be made to maintain the standard working hours and prevent the strengthening of operations by means of extension of hours, and to accelerate the expansion of installations.

2) With the object of planning the material strengthening of the munition mobilization capacity, enterprises will be guided mainly according to the following points through the Superintendent system:

- (a) Old-fashioned equipment will be improved; up-to-date equipment will be reinforced.
- (b) Obstacles in the course of production accompanying conversion into wartime production will be rectified, and lags in the various associated industries will be removed.
- (c) Control over industrial copartnership will be effected to facilitate the disposition of the previously mentioned clauses.

The aforementioned supervision for the present, will be executed from the standpoint of the parties placing the orders, but plans will be made for the strengthening of guidance and supervision by enacting the necessary laws and regulations as soon as possible.

Furthermore, the Superintendent system will be carefully re-studied as regards organization, system, structure and stationing, and consideration will be given to the unification and adjustment of Factory Administration Government Office and Factory Superintendent systems at the time of enforcement of munition mobilization.

3) To facilitate the peacetime to wartime conversion of industries: manufacturing war materials, structural control will be accelerated according to the following points:

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3) To facilitate the peacetime to wartime conversion of industries: manufacturing war materials, structural control will be accelerated according to the following points:

- (a) Proper guidance will be given to the merger and incorporation of enterprises.

According to the needs of the times, an organ to facilitate the general control of industries manufacturing important war materials will be gradually established.

- (b) The formation of an organic production bloc will be fostered. For this purpose, the nuclear factories and the sub-contracting factories will be logically arranged, and their relationship with parts factories, material factories and raw material factories will be adjusted.

Special attention will be given towards putting an end to the present disorganized condition of the sub-contracting factories.

- (c) The organizing of unions will be guided from the military point of view to enable the mass power of the small-sized factories to collaborate effectively in the production of war materials in time of war.

4) Social policies will be tempered from the viewpoint of national defense in a wide sense and the necessary control over industries manufacturing war materials will be exercised.

For this purpose, consideration will be given to profit control, labor control and localization of industries.

VI. OUTLINE OF GUIDANCE OF GOVERNMENT-MANAGED INSTITUTIONS.

1) Although definite plans will be worked out separately in regard to government managed institutions, their expansion will be planned, in general, according to the following essentials for the purpose of strengthening the munition mobilization capacity:-

- (a) Expansion of installation through the continuous budget, especially
 - (1) the moving of ordnance equipment to the Continent, and
 - (2) adjustment of the bottle-necks of wartime production.
- (b) Improvement of equipment operated personally.

- (c) Organization of man-power and training of technicians.
- (d) Intensification of labor guidance plans.
- (e) Supplying of necessary raw materials and materials as well as arrangement and renovation of materials for armaments.

2) As regards expansion of Government-managed institutions, special attention will be paid to the allocation of munitions to the Government and private industries, especially in regard to the allocation of operations in the course of production.

Special consideration will be given to the efficient use of the national industrial power in time of war.

VII. OUTLINE OF TECHNICAL RESEARCH AND TYPE AND MODEL CONTROL.

1) As regards airplane manufacturing technique, all government and civilian technical researches will be mobilized so as to surpass the world's maximum level by the end of the 1941 fiscal year. In connection thereto active efforts will be exerted towards absorbing superior foreign technique.

2) As regards arms manufacturing technique, means will be devised for wartime mass production.

Especially in regard to shells, the following simplified manufacturing methods will be speedily established by taking their wartime use into consideration.

- (a) Manufacturing Method utilizing steel tubes.
- (b) The abolition or lessening of Lathe operations in the inside of the shell bodies for extraction shells and steel tube shells and the mass production method of special substitute shells to lessen the burden of the machine tool industry.

3) As regards the types and models of war materials, simplification of control over types and models as well as the establishment of substitute types and substitute models will be made after ascertaining and making a thorough study of the actual facts in regard to wartime supply.

- (c) Organization of man-power and training of technicians.
- (d) Intensification of labor guidance plans.
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TRANSLATOR'S NOTE

In view of the impracticability of reproducing in English the charts referred to in the following Appendices, a copy of the page in the original Japanese document containing the chart referred to in an Appendix is included at the end of such Appendix.

APPENDIX NO. 1

Standard Chart of Conversion of peace-time production of Munition Industries

<u>Peace-time production according to industry</u>	<u>Converted Wartime Production Item</u>
<u>METAL WORKS</u>	:
Metal refining (including materials)	: Raw materials and materials for arms, : etc.
Light alloys	: Airplane materials
Cast iron products	: Hand grenades, tank tracks, arm : materials, materials and parts for : airplanes, automobiles, etc.
Steel pipes	: Shell bodies, bomb bodies
Rolled plates	: Steel helmets, shields, and other : parts for weapons
Various other metal products	: Parts for weapons, tank parts, : shell parts
<u>MACHINE TOOL WORKS</u>	:
Arms (including aircraft)	:)
Engines	:) Same product
Steamboilers	:)
Insulated electric wires and cables	:)
Electrical communication sets	:)
Batteries	:) Same product
Mining, sorting and refining machinery	:)
Spinning and weaving machinery	: Manufacture of shells by lathes, fuses, : parts of weapons.
Construction machinery	: Same products, parts of weapons

Contd on p.

<u>Peacetime Production</u>	<u>Warime Production after Conversion</u>
Machinery for ceramics	: Manufacture of shells using lathes
Agricultural machinery	: Same product, wooden tools
Paper-making machinery	:)Machinery for manufacturing
Machinery for Chemical Industry	:)Gunpowder
Elevators	: Steel plates, weapons
Cranes	: Same product; parts of weapons
Pumps	: Ditto, power engines
Scales and measures	: Ditto, testing implements
Meters	: Ditto, parts for firearms, fuses
Watches	: Fuses, parts of firearms
Testing and scientific instruments	: Same product, testing implements
Medical instruments	: Ditto
Surveying and drafting instruments	: Ditto, glasses, etc.
Optical instruments	: Optical weapons
Glasses	: Same product
Machine tools for lighting purposes	: Ditto, search lights
Vehicles	: Locomotives for army use, parts of weapons, assembling of tanks, manufacturing of shells using lathes.
Shipbuilding - Shipbuilding Section	: Equipping of ships, boiler mfg., material. For army's Marine transportation.
Enginemfg. Section	: Parts of weapons, mfg. of shells using lathe
Fittings for ships	: Same product

Contd. on P.

<u>Peacetime Production</u>	<u>Wartime Production after Conversion</u>
Automobile parts	: Ditto, tank parts
Automobile assembling	: Ditto
POTTERIES	:
Ceramic ware	:) Ditto
Glass and glass products	:)
Bricks and fire-proof articles	:)
Cement	:) Ditto
Lime	:)
Enamelled iron ware	: Steel helmets, etc.
CHEMICAL WORKS	:
Medicine manufacturing	: Same product
Ammonium sulphate	: Raw material for gunpowder and explosives
Soda and bleaching powder	: Anti-gas drugs, chemical warfare weapon
Dyes and mediums	: Raw material for gunpowder, chemical warfare weapons
Paints and pigments	: Same product; raw material for gunpowder
Soap and cosmetics	: Raw material for explosives
Pure cotton	: Raw material for gunpowder
Mineral oils	:) Same product
Vegetable oils and fats	:)
Rubber products	: Anti-gas clothing, parts for automobiles, airplanes and weapons
Pulp	:) Same product
Paper manufacturing	:)

Contd. on P.

<u>Peacetime Production</u>	<u>Wartime Production after Conversion</u>
Celluloid	:) Raw materials for gunpowder
Rayon	:) and explosives
Leather tanning	:) Same product
Fur dressing	:)
	:
GAS AND ELECTRICITY	: Fuel and motive power
	:
LUMBER AND WOODEN PRODUCTS	: Materials and parts for weapons and
	: tools
	:
PRINTING AND BOOKBINDING	: Same product
	:
FOOD FACTORIES	:
	:
Japanese alcoholic beverages	:) same product, alcohol
Western alcoholic beverages	:)
	:
Beer	:)
Soy sauce	:)
Soy bean paste	:)
Flour milling	:) Ditto
Sugar refining	:)
Canned goods	:)
Bread Baking	:)
Confectionery and millet-jelly	:)

Remarks - (1) Even for the munition production in peacetime, the plan will partially follow this chart.

- (2) In regard to items marked "ditto" in the chart, many do not need to have their production converted, but for the sake of reference they have been included.

APPENDIX NO. 2

GENERAL OUTLINE FOR THE COMPUTATION OF THE OBJECTIVES
OF EXPANSION OF WAR MATERIAL INDUSTRIES

1) Excluding that which concerns the airplane industry, computations are made in general in the following manner:

- (1) The ratio obtained after comparing the installation capacity of the industry concerned required for digesting the material equipment budget accompanying the repletion of armaments with the productive power for the 1936 fiscal year the required ratio for expansion of installations.

In this case, every effort should be made to compute the objectives positively on the assumption that the production of civilian products shall not be oppressed in the branch of industry concerned and that the operation rate for the 1936 fiscal year shall not be increased.

- (2) The wartime total productive power of the expanded installations shall be determined by computing the wartime operation rate.
- (3) The shortage obtained after comparing the wartime total productive power and the required wartime supplying power shall be supplemented by the wartime total capacity of the industries whose production is to be converted in time of war.

To supplement the above shortage, efforts shall be exerted towards the cultivation of technicians from peace time by means of education orders and in regard to its scope, the capacity of the machine tool industries making rapid progress through the comprehensive national policy is to be determined and relied upon. In the event of there still being a shortage, the speedy expansion of wartime facilities based on the counter measures for productive machinery, shall be planned and the demands regarding these matters shall be transferred to the Five Year Major Industry Plan.

2) As for the airplane industry, it shall be guided by the foregoing clause insofar as it depends on the military budget, but compute the objective positively without relying on the figures of the already determined armament repletion plan, but by taking a far-sighted view of the future demand and supply by taking into consideration the revision of the aviation repletion plan.

APPENDIX 3 (Part 1)

Basic Table For Computing The Objective Of Expansion for the Airplane Industry Cultivated under the Already Fixed Military Budget.

(Goal to be five years hence and to include Japan and Manchoukuo)

(Judgment) 1. Accompanying the repletion of armament, it is necessary to increase the 1937 installation capacity of factories connected with military aviation three-fold.

2. Expansion of about two-fold, especially, must be completed by 1938.

Plan:

Present State	<u>Army</u>	<u>Navy</u>
1936 Perfected Units	522	520
Total war time operation capacity	700	700
Based on present plan (Army --- 140 companies)		
• (Navy--Those of war time)		
(connections are estimated)		
Repletion of Armaments	From 522 raises	From 520 raises to
1937-1943 Units perfected	to maximum of	maximum of 900 and
annually	1450 and drops	drops to 700
	to 1050	
Expansion accompanying repletion of armaments		
1939 (40) Expansion ratio	About 3 fold	About 1.8 fold
1939 (40) and thereafter		
Total peace time operation capacity	About 4000	About 3400
		(will be accompe- nied by additiona increase)
1942 and thereafter	About 5000, but to	About 3000
Required war time capacity	meet the require-	(about 1500
(first year)	ments of emergency	during period
	organization (140	of preparation
	companies) about	for war)
	10,000	
Supplementary measures	War time expansion and Army- Navy munition industry mobilization agreement for A. Creation of active aviation industry through the establishment of the national aviation policy for B (Refer to Part 2)	

NOTE:

Upon their realization through national measures as listed in Part 2, the policy of cultivation of industries concerned must undergo the necessary changes.

APPENDIX NO. 3 - Part 3

Computation of Objectives of Expansion for Airplane
Industry Based on National Policy Measures

Estimation of War-time Productive Power

Judgment

- (1) If an equipment capacity be maintained so as to make it possible to cope with a peace-time operation of 10,000 planes, the following mobilization plan will, even in the case of a peace-time actual demand of 3,000 planes, make the capacity reach close to an annual production of 20,000 planes from and after the 8th month, and over 20,000 planes from the 10th month.

However, the total of the first year's production will be a little less than 13,000 planes, and that of the second year approximately 30,000 planes.

- (2) In the event of it being possible to make the peace-time actual demand around 4,000 planes, this would, in addition to increasing the certainty of mobilization, bring the total of the first year's production up to around 14,500 planes.

Mobilization Plan

- (1) The personnel at the beginning of the outbreak of war will be increased about seven-fold.
- (2) Production for the first two months will be conducted in the following manner: -
 - (1) With 2/3 of the peace-time personnel
 - (2) On 20% of the total equipment
 - (3) Net working time, 13 hours

- (3) The training of newly employed workers will be conducted as follows during the first two months:-
- (1) $\frac{1}{3}$ of the peace-time workers shall be placed in charge of training (17 men to one trainer)
 - (2) Training by two daily shifts' (day and night) system
 - (3) In day-time on 80% of the suspended equipment
 - (4) At night time on 100% of the equipment.
- (4) From and after the third month production will be conducted as follows:
- (1) Equal dividing-up of peace-time workers and newly employed workers in both day and night-time.
 - (2) Enforcing of a two-shift system of 22½ actual working hours to be divided equally day and night.
- (5) From and after the sixth month the peace-time equipment will be increased monthly by 5% (implying Production Increase from that month)
- (6) Along with the foregoing, the personnel will be increased monthly ($\frac{1}{3}$ of peace-time) from and after the fourth month to meet 10% of the peace-time equipment.

Production Progress

1. As per chart below.
2. As per remarks below the chart, it will be necessary to use the automobile industry.

Mobilization Curve (Personnel, Equipment, Factory Efficiency and Production Curves)

Legend:

=====	Efficiency curve of body factories
-----	Productive " " " "
=====	Efficiency curve of engine factories
-----	Production " " " "

Attendant (--- Efficiency curve of body production increasing
to (factories
increase (Increased production curve of bodies
equipment ((O O O O Efficiency curve of engine production factories
(||||| Increased production curve of engines

Personnel increase curve accompanying expansion of equipment.

Personnel Mobilization Curve (about seven-fold)

Bodies Production Curve

Engines " "

Equipment Expansion Curve

The Peace-time equipment capacity:
(to meet an annual production
of 10,000 planes by operating
10 hours daily in peace-time). Approximately
20,000 sets of machine tools for engines, and from
8,000 to 9,000 sets for bodies.

Peace-time break-even point (annual production of
7,000 planes)

Peace-time demand (annual production 3,000 planes)

According to established plan, the Army requires 1,377
planes, the Navy 900 planes, besides which 400 planes
are required for replenishing a standing civilian air
strength of 2,000 planes, making the total requirement
2,677 planes.

Attendant (--- Efficiency curve of body production increasing
to (factories
increase (
equipment (Increased production curve of bodies
(
(O O O O Efficiency curve of engine production factories
(
(//// Increased production curve of engines

Personnel increase curve accompanying expansion of equipment.

Personnel Mobilization Curve (about seven-fold)

Bodies Production Curve

Engines " "

Equipment Expansion Curve

The Peace-time equipment capacity:
(to meet an annual production
of 10,000 planes by operating
10 hours daily in peace-time). Approximately
20,000 sets of machine tools for engines, and from
8,000 to 9,000 sets for bodies.

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According to established plan, the Army requires 1,377
planes, the Navy 900 planes, besides which 400 planes
are required for replenishing a standing civilian air
strength of 2,000 planes, making the total requirement
2,677 planes.

Months from
Outbreak of
War

1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18

No. of Planes Monthly
Produced by
Permanent
Equipment

Production

217 217 217 217 900 1158 1300 1450 1450 1600 1600 1750 1750 1750 1750 1750 1750

Annual
Production

TOTAL (FIRST YEAR) 12,076 PLANES

Increased
Equipment
Increased
Production

33 83 158 225 291 375 458 541 625 708 791

(SECOND YEAR) 30,996 PLANES
(Up to 24th Month)

TOTAL

Annual
Production

(FIRST YEAR) 12,076 PLANES

DESCRIPTIVE EXPLANATION

No. of Monthly Production Planes = $10,000 \times \text{Body Production Index (\%)}$
12

However, should the production of Engines fail to keep up, it will become necessary to utilize the automobile industry.

REMARKS: -

- (1) The required degree of conversion of the Automobile Engine Industry shall be roughly as follows:-

Quantity of Shortage of Airplane Engines =
 $10,000 \times 28.3\% \times 8 \times 1.5 = 2,831$

12

(28.3% represents the 8 months' average of difference in production indices.)

(1.5 represents 1.5 Engines per Body).

By calculating the foregoing, the quantity of shortage of Automobile Engines shall be $2,831 \times 20 = 56,620$ units.

- (2) The War-time First Year Capacity of the Automobile Industry will be at least 150,000 units (peace-time 100,000). In addition, it will be possible to obtain a capacity for the production of 57,000 units from the capacity now used for the production of miniature cars and 3-wheel as well as 2-wheel motorcycles.

JUDGMENT re POSSIBILITY OF MEETING DEMAND FOR WAR-TIME MILITARY PLANES

By concluding an Army-Navy Munition Industry Mobilization agreement based on the figures for 1937 according to different operations along with the above chart and by placing the peace-time regular civilian air force of 2,000 planes at the disposal of the Army, there will be no difficulty in effecting the following supply of Military Planes, viz:-

First Year	Approx. 10,000 planes
Second Year	Approx. 20,000 planes

Distribution of production between the Army
and Navy

As per chart below (which, however, is for the
first year only).

Number of monthly airplane production

Airplane production curve

Replenish curve of army planes

Number of standing civilian air-strength

Peace-time equipment capacity (825 planes per month)

Peace-time actual demand (250 " " ")

Explanatory Remarks:-

The War-time First Year's Total Airplane Replenishment will be

$$12,866 + 2,000 = 14,866 \text{ planes.}$$

By dividing same up between the main strategic forces and reserve forces in accordance with the Army-Navy Munition Industry Mobilization Agreement at the ratio of 5:3 (62 : 38) by considering the 2,000 civilian planes as Army planes the number of Army planes will be approximately 10,041.

Considering the productive power for the first four months and also the necessity of making a monthly replenishment of approximately 20 per cent against the 1,780 planes required under the established plan for first-line military strength, the standing strength of civilian air force is an absolute requisite.

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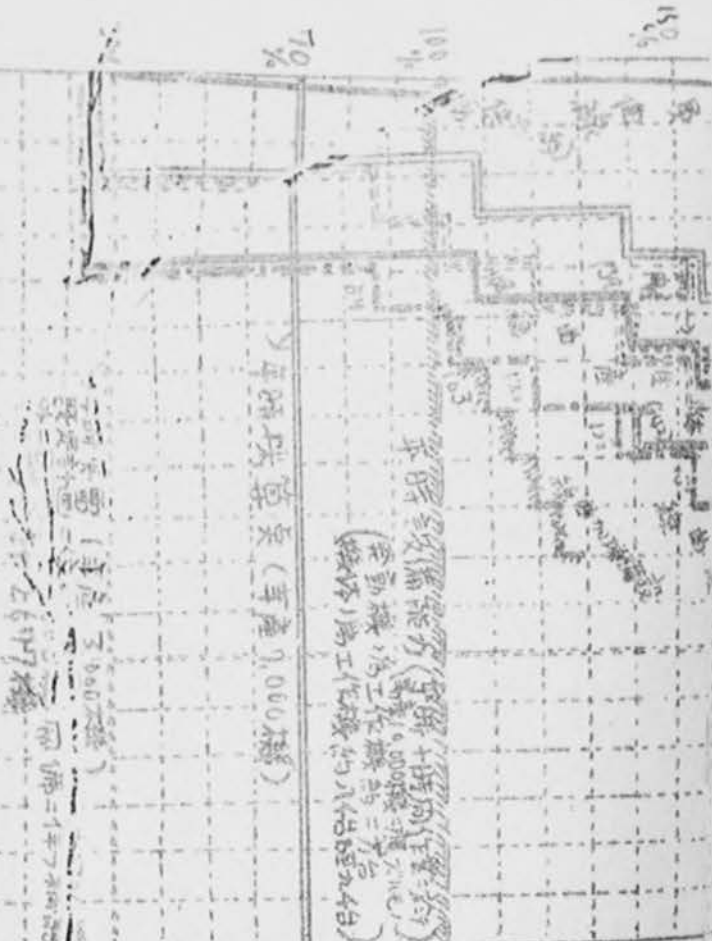
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實性ヲ増スル共ニ第一ノ年ノ生産ノ計ハ萬四千五百機程度トナシ、



电动机的工作电压为 380V

平均計算(事産) 0.066機

一、一、二、三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百

開費月次	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
固定費	二	二	二	二	九	二	三	一	一	一	一	一	一	一	一	一	一	一
変動費	二	二	二	二	九	二	三	一	一	一	一	一	一	一	一	一	一	一
生業費	二	二	二	二	九	二	三	一	一	一	一	一	一	一	一	一	一	一
合計	二	二	二	二	九	二	三	一	一	一	一	一	一	一	一	一	一	一
(第一年)	12,866	12,076	83	158	25	21	305	450	541	635	108	771	30,996	30,996	30,996	30,996	30,996	30,996

(第一年) 12.866 噸
10.000 X 堆入量共 10.000 噸

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 $\frac{1}{2} = \frac{1}{2}$ 30.996 16% (1.24%)

第 4 册

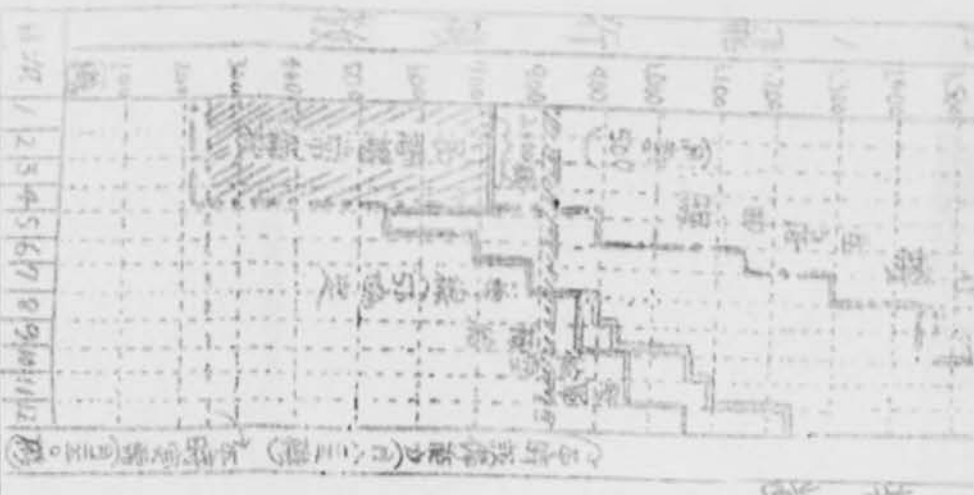
(注) (1) 自製主要材料基礎理の進捗報告 工日/1,400 人/月

1. 已知函数 $f(x) = \begin{cases} x^2 + 2x + 1 & x \leq 0 \\ x^2 - 2x + 1 & x > 0 \end{cases}$ ，求 $f(x)$ 的表达式。

八、 $\frac{1}{2}$ 倍の電圧

(2) 上記不足1台を力率算で繰上り計算数=2831×20=56,620台
自動要工業器時年費等一庫カケル15箇台(平時10箇所)及外ハ1台
車、自動車三、二輛車、相当於放一庫カ能力中ヨリ5萬7千台

能力ヲ必要ナルトモ不能ナリ



① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

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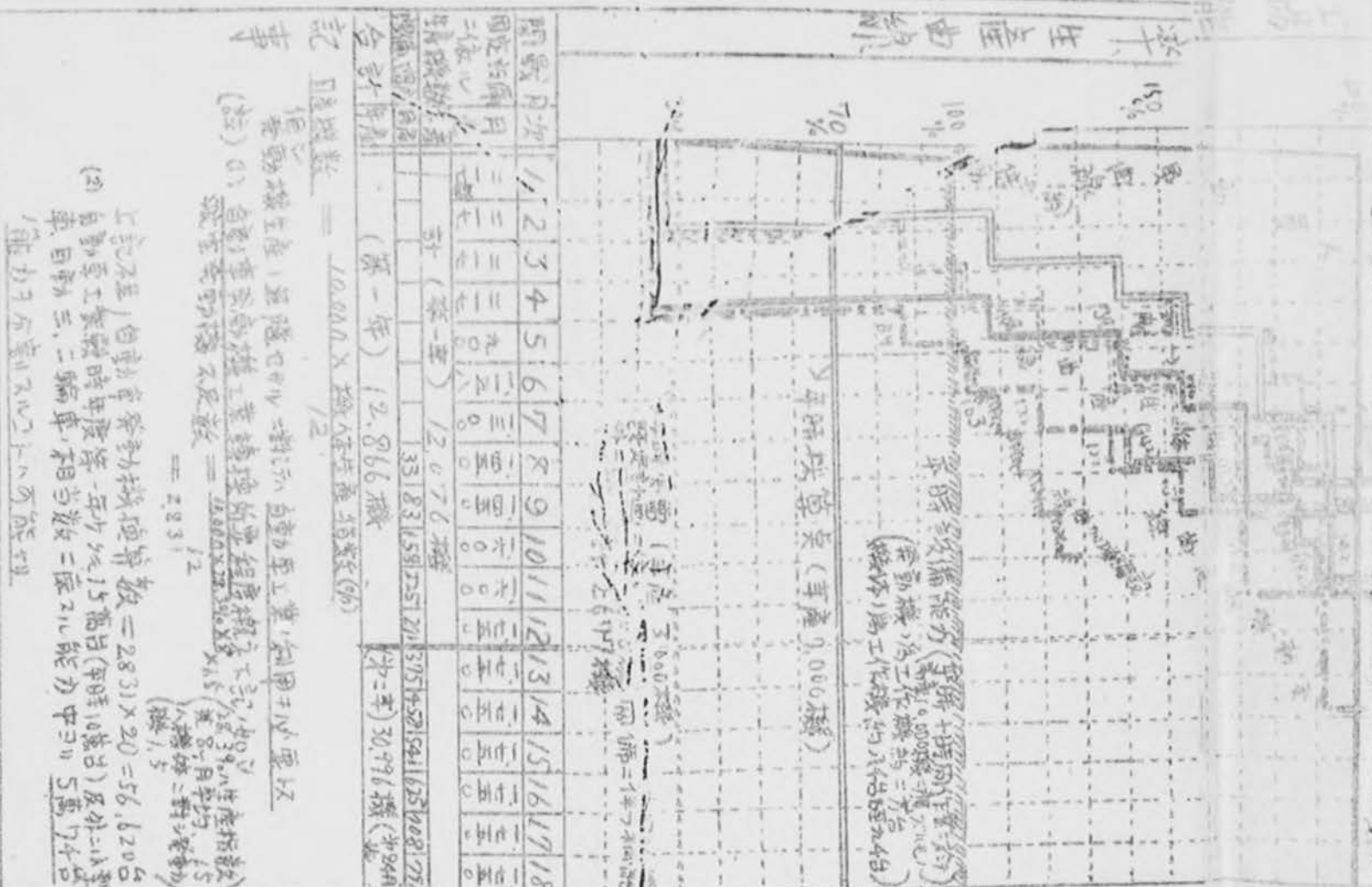
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1000

$$1.784 \times 10^4 = 2.5 \times 10^4 \times 0.0708$$

實 力 生 産 量
三 千 機 場 合 二 於 三 主 記 動 員 要 領 二 依 一 第 八 月 以 降 年 產 二 萬
約 三 萬 機 入
實 質 性 増 大 共 三 第 一 年 生 産 一 計 一 萬 四 千 五 百 機 入 程 度 上 十 二



生 産 機 械 月 別

固 定 資 産 月 別

生 産 機 械 月 別

合 計 月 別

年 距 比 算 果 (手 産 0.006 機)

生 産 力 増 大 (手 産 3.600 機)

生 産 機 械 月 別

固 定 資 産 月 別

生 産 機 械 月 別

合 計 月 別

APPENDIX NO. 4

Basic Table for Computation of Objective of Expansion for Arms Industries for the First Year from Outbreak of War (with the goal set for Five Years Hence, and including both Japan and Manchuria.)

Judgment

- (1) For the sake of repletion of armaments, it shall be necessary to increase approximately four-fold, the equipment under private management that are being utilized at present for peace-time purposes.
- (2) For the sake of war-time replenishment it shall be necessary, in addition to bringing into full play the total capacity of the forementioned expansion and increase in government-owned equipment as well as the industries that are to be prepared for conversion into war-time production through educational requests during peace-time and to seek for a war-time expansion of equipment corresponding to approximately three times of the equipment under private management that are being utilized at present for peace-time purposes.

Peace-time Equipment Accompanying the Repletion of Armaments

(the indices have been computed by figuring the Equipment Value for 1936 as 100; 100 = approximately ¥ 34,000,000).

<u>Year</u>	<u>Index No.</u>	
1936	100)
1937	148)
1938	184)
1939	185)
1940	194)
1941	188)
1942	178)
1943	107)

Repletion of Armaments
Classified by
Year

APPENDIX NO. 4

Estimation of Expansion Objective

Work allotment for governmental and private factories in
peace-time operation in 1936

Governmental 70
Private 30

War-time plans for 1936

(a) Governmental (full capacity) 114
(b) Private 56

NOTE: Increase of operation ratio in (b) . . . 180%
(War-time private production upon conversion . . . 20
Planned Capacity Limit 190

Capacity required to replenish armament mobilization
for 1936 (total) 250

Capacity required for temporary formation
(total) 390

Allotment for governmental and private peace-time production
of 1938

Governmental 60%

Private 40%

War-time capacity of private production (Basic) capacity (b)
----- 125

* Multiply (b) with wartime operation ratio of 180% (c) . . . 225

Condition of replenishment after repletion armament.

(Governmental) similar to (a) 114
(") replenishment

increase of 1/2 (a) 57

(Private) similar to (c) 225

Reconversion of war-time private production 65

Planned capacity limit for 1942	460
Capacity to increase production (d)	180
Capacity required to replenish armaments mobilization for 1941 (total)	500
Capacity required for temporary formation (total)	640
Expansion increase ratio	
Private 4 time	125
Multiplied ratio of war-time replenishment governmental	(70)
Private factories war-time capacity	(30)
(multiply war-time operation ratio 180% to (basic)	(54)
Capacity for increased production (increase) wartime equipment) same as (d) 5 time	130
Anticipated reconversion of war-time private production	65

REMARKS:

- (Note 1) During the first period of consolidating equipment, government enterprises will most probably operate 13 to 14 hours per day. This will be unavoidable in regard to arms industry (2/3 of the total war-time capacity).
- (Note 2) To cultivate capacity "A" among civilian industries, attention particularly must be given to guidance of technique.
- (Note 3) By anticipated capacity, we mean the capacity expected in time of war by preparing for the conversion into war-time production through educational requests from peacetime.

Planned capacity limit for 1942	460
Capacity to increase production (d)	180
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REMARKS:

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- (Note 2) To cultivate capacity "A" among civilian industries, attention particularly must be given to guidance of technique.
- (Note 3) By anticipated capacity, we mean the capacity expected in time of war by preparing for the conversion into war-time production through educational requests from peacetime.

APPENDIX NO. 5

Basic Table for Computing the Objective of Expansion for Shell-Body (including Bombs) and Fuse Manufacturing Industry Utilizing Lathes.(with the Goal set for Five Years Hence, and including both Japan and Manchuria)Judgment

- (1) With the steady progress in the repletion of armaments, the present private-owned equipment capacity for manufacturing shells by the exclusive use of lathes shall have to be increased to about seven-fold.
- (2) In addition to the foregoing it shall become especially necessary to actively guide the wholesale expansion of the various machine and tool industries convertible into war-time production simultaneous to the promotion of general industries.

Peace-time Organization (Equipment) as effected by the Repletion of Armaments.
 (the Index figure 100 shall represent the Peace-time Organization Value for 1936)

Armament Repletion	(1936	100
	(1937	130
classified	(1938	170
	(1939	191
by year	(1940	244
	(1941	296
	(1942	296
	(1943	216

Expansion of Shell-Manufacturing Factories as affected by the aforementioned Maximum Production.

- (a) Capacity required to process maximum production 300.
- (b) Allotment of Governmental and Private Work for production in 1936.

Governmental	70
Private	<u>30</u>
	100

APPENDIX NO. 5

Basic Table for Computing the Objective of Expansion for Shell-Body (including Bombs) and Fuse Manufacturing Industry Utilizing Lathes.(with the Goal set for Five Years Hence, and including both Japan and Manchuria)Judgment

- (1) With the steady progress in the repletion of armaments, the present private-owned equipment capacity for manufacturing shells by the exclusive use of lathes shall have to be increased to about seven-fold.
- (2) In addition to the foregoing it shall become especially necessary to actively guide the wholesale expansion of the various machine and tool industries convertible into war-time production simultaneous to the promotion of general industries.

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 (the Index figure 100 shall represent the Peace-time Organization Value for 1936)

Armament Repletion	(1936	100
	(1937	130
classified	(1938	170
	(1939	191
by year	(1940	244
	(1941	296
	(1942	296
	(1943	216

Expansion of Shell-Manufacturing Factories as affected by the aforementioned Maximum Production.

- (a) Capacity required to process maximum production 300.
- (b) Allotment of Governmental and Private Work for production in 1936.

Governmental	70
Private	<u>30</u>
	100

(c) Allotment of Governmental and Private Work for maximum production.

Governmental 80
 Private 220
 300

(Almost no expansion seen in governmental work form (b)).

Maximum wartime capacity of private works allotment of (c)
 480
 (Wartime operating ratio . . . 220%).

Required Wartime Capacity and its Conditions of Sufficiency.

(d) Allotment for Governmental and Private work in Wartime Capacity Plans for 1936; relation between the required replenishment capacity and its Conditions of Sufficiency.

(Governmental wartime capacity) 400

Private-operated and private owned machineries and machine tools convertible for production (abt 500)
 (520)

Capacity limit of 1936 plans 1370
 Capacity required for temporary formation . 160

Coefficient of Expansion and Required Supplementary Capacity.

Coefficient in Peacetime Expansion 1: 7.4
 (Comparison of respective private enterprise (a) and (c)).

NOTE: Reparation for Conversion from peacetime through trial orders. ----

Ratio	(Governmental 70	[similar to (b)]
in	(
Wartime	(Private30	[similar to (c)]
Capacity	(

NOTE: Anticipated Capacity (converted Production of private enterprise in wartime) is similar to (c).

Capacity of Increase Production (increase and strengthening of factory installations in wartime) 18 times or 1260. Comparative to (a) of 1936 which will be the coefficient of required supplementary capacity in wartime.

[illegible]

Remarks: -

- (1) The increased installations of extracting equipment is an absolutely indispensable factor so as not to hinder the expansion of the industry specified in this Appendix.

These shall be installed in the Government factories and special companies connected with the steel business.

- (2) Especially, the plans to expand production capacity by lathes is due to the enormous wartime demands as well as the easy conversion of factories for military and civilian needs.

For the present it is considered unnecessary to give any guidance towards private concerns regarding the special expansion of the cartridge-case, explosive powder and fuse manufacturing industries.

- (3) The attainment of expansion may be impossible unless suitably coupled by enacting of standard working hours, advance payment of funds for increasing equipment as well as counter-measures regarding productive machinery.

- (4) In computing the indices, the lathe operating cost for shell bodies and fuses has been roughly figured at 1/2 of the balance after having deducted the rifle cartridge costs from the entire ammunition cost.

Furthermore, the index figure 100 represents roughly Yen 12,000,000.

APPENDIX NO. 6

Basic Table (indices) for Computation of Objective of Expansion for Tank Industry (including Armored Cars)

Judgment

For the purpose of repletion of armaments, it shall be necessary to increase the equipment capacity (1936) by approximately 2.6 times.

Explanatory Diagram

(Government-operated equipments have not been expressly classified in view of their capacity).

Equipment Capacity for 1936	100
" " " 1937	160
" " " 1938	175
" " " 1939	210
" " " 1940	196
" " " 1941	210
" " " 1942	162
" " " 1943	147

Equipment Capacity for 1936 100

Peace-time Standard Capacity for 1936
(showing surplus margin of about 30% . 130

War-time Capacity for 1936 220

Expanded Peace-time Equipment 210

Expanded Peace-time Capacity (allowing
for 30% surplus margin 260

Expanded War-time Capacity 470)

" " " of Government-owned
Institutions 220)

1580

War-time Production Conversion of Private
Enterprises *890)
(* of which approximately 900 Tanks
are converted)

Engines---Utilization of Automobile Industry -- Manchuria.
Steel Plates -- Manchuria.

REMARKS:

- (1) The War-time Operating Rates shall be 180% similar to the Arms Industries.
- (2) Although this brand of war-time industry possess a fair deal of surplus margin at present, its equipment capacity shall be doubled by seizing the opportunity for doubling the quantity of Peace-time Equipment.

APPENDIX NO. 7

Standard Chart Showing Goal of Monthly War-time Production
of Principal War Materials in Manchuria (Scheduled for
Five Years Hence)

ARMS

Rifles	5,000
Light Machine Guns	350
Heavy Machine Guns	500
(both fixed and revolving types)	
Automatic Cannons	20
Heavy Grenade Throwers	200
Various types of Infantry Cannons	15
Small-bore Cannons	25
Anti-aircraft guns	5
Medium-bore Cannons	10
Tanks (including Armored Cars)	50
Others	To be expanded as much as possible so as to cope with the aforementioned arms.

APPENDIX NO. 7

Standard Chart - cont'd

AMMUNITION

Cartridges (6.5 and 7.7 m/m)	The war-time capacity of the present Mukden arsenal is to be expanded as much as possible.
20 m/m Cartridges	35,000
Hand Grenades	170,000
Heavy Grenade Shells	110,000
37 m/m Shells	36,000
57 m/m Shells	10,000
75 m/m Shells	350,000
10 c/m Shells	35,000
15 c/m Shells	20,000
15 kg. Bombs	10,000
50 kg. Bombs	5,000
100 kg. Bombs	1,000
250 kg. Bombs	800
500 kg. Bombs	500
Gunpowder	To be expanded as much as possible in accordance with the Gunpowder Resources in Manchuria.
Fuses	To be expanded as much as possible to cope with the aforementioned shells.

Cartridge Cases To be expanded and repaired
as much as possible to cope
with one-half of the afore-
mentioned shells.

AIRCRAFT

Airplanes 50 at start
(It is being considered to
furthermore expand same up
to 250 in order to cope
with the New Aircraft
Repletion Plan).

EQUIPMENT

Freight Cars (for military use)
(light Railways) 130

Automobiles Maximum production will be
promptly assigned on
assumption that the funda-
mental equipment for the
9 year plan is about
completed.

Other Accordingly

CLOTHING Accordingly

FOODSTUFFS Accordingly

HORSESHOES Accordingly

Cartridge Cases To be expanded and repaired
as much as possible to cope
with one-half of the afore-
mentioned shells.

AIRCRAFT

Airplanes 50 at start
(It is being considered to
furthermore expand same up
to 250 in order to cope
with the New Aircraft
Repletion Plan).

EQUIPMENT

Freight Cars (for military use)
(light Railways) 130

Automobiles Maximum production will be
promptly assigned on
assumption that the funda-
mental equipment for the
9 year plan is about
completed.

Other Accordingly

CLOTHING Accordingly

FOODSTUFFS Accordingly

HORSESHOES Accordingly

No. 28

Doc 900

品名		單位		數量		價值		備註	
軍用	小銃	枝	5000	5000	3500	5000	5000	五十五枝	五十五枝
	輕機槍	枝	3500	3500	5000	5000	5000	五十五枝	五十五枝
	重機槍	枝	5000	5000	5000	5000	5000	五十五枝	五十五枝
	機關砲	門	200	200	200	200	200	五十五枝	五十五枝
	重榴彈筒	門	200	200	200	200	200	五十五枝	五十五枝
	各種步槍	枝	1500	1500	1500	1500	1500	五十五枝	五十五枝
	小口徑步槍	枝	2500	2500	2500	2500	2500	五十五枝	五十五枝
	高射砲	門	500	500	500	500	500	五十五枝	五十五枝
	中口徑砲	門	1000	1000	1000	1000	1000	五十五枝	五十五枝
	戰車	輛	500	500	500	500	500	五十五枝	五十五枝
其他	其他	項	3500	3500	3500	3500	3500	五十五枝	五十五枝
	實元	元	3500	3500	3500	3500	3500	五十五枝	五十五枝
	二十枝實元	元	3500	3500	3500	3500	3500	五十五枝	五十五枝
	十枝實元	元	170000	170000	170000	170000	170000	五十五枝	五十五枝
	重榴彈筒	門	100000	100000	100000	100000	100000	五十五枝	五十五枝
	三十七枝實元	元	360000	360000	360000	360000	360000	五十五枝	五十五枝
	五十七枝實元	元	100000	100000	100000	100000	100000	五十五枝	五十五枝
	六十五枝實元	元	350000	350000	350000	350000	350000	五十五枝	五十五枝
	十枝實元	元	350000	350000	350000	350000	350000	五十五枝	五十五枝
	十枝實元	元	350000	350000	350000	350000	350000	五十五枝	五十五枝
軍用	軍用車	輛	3500	3500	3500	3500	3500	五十五枝	五十五枝
	軍用輕鐵	輛	130	130	130	130	130	五十五枝	五十五枝
	飛行機	架	500	500	500	500	500	五十五枝	五十五枝
	飛機	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
軍用	軍用車	輛	3500	3500	3500	3500	3500	五十五枝	五十五枝
	軍用輕鐵	輛	130	130	130	130	130	五十五枝	五十五枝
	飛行機	架	500	500	500	500	500	五十五枝	五十五枝
	飛機	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝
	飛艇	架	500	500	500	500	500	五十五枝	五十五枝

APPENDIX NO. 8

Standard Chart Showing the Respective Spheres of Influence of Japanese and Manchurian War Material Industries in regard to Extension. (with the Goal set for Five Years Hence).

(Note: Chart denotes war-time condition).

Airplane Industry
Respective Spheres of Influence of Japanese and Manchurian Industries in regard to the War-time Capacity Fixed Plan based on the Army's 140 Company Plan and the Navy's Second Plan

Airplane Industry (Japan Proper)	for the Army	3,400 planes
" " (Manchuria)	" " "	800 planes
" " (Japan Proper)	" " Navy	2,400 planes

Refer A: Allotment of war-time capacity when Army is given priority over Navy.

Army	5,000 planes
Navy	1,400 planes

Newly Anticipated Plan and its Application to Japan Proper and Manchuria.

Japan Proper	7,000 planes
Manchuria (Korea may also be included)	3,000 planes
Total	10,000 planes

Arms Industry

The ratios applicable to the major war materials for which there will be large war-time demands shall be

Japan Proper and Chosen	80%
Manchuria	20%

As regards the Parts, etc., for major war materials requiring special precision work, the ratio for Manchuria may be reduced accordingly.

C E R T I F I C A T E

W.D.C. No. _____
I.P.S. No. 9002

Statement of Source and Authenticity

I, Kaneo Ishibashi, hereby certify that I am officially connected with the Japanese Government in the following capacity: Corresponding Secretary, and that as such official I have custody of the document hereto attached consisting of _____ pages, dated _____, 19____, and described as follows: Draft outline of 5 year plan of production of war materials.

I further certify that the attached record and document is an official document of the Japanese Government, and that it is a part of the official archives and files of the following named ministry or department (specifying also the file number or citation, if any, or any other official designation of the regular location of the document in the archives or files): First Demobilization Bureau.

Signed at Tokyo on this
6 day of July, 1946.

/s/ K. ISHIBASHI
Signature of Official

SEAL

Witness: /s/ SHINAJI KOBAYASHI

Official Capacity

Statement of Official Procurement

I, William C. Prout, hereby certify that I am associated with the General Headquarters of the Supreme Commander for the Allied Powers, and that the above described document was obtained by me from the above signed official of the Japanese Government in the conduct of my official business.

Signed at Tokyo on this
6th day of July, 1946.

/s/ WILLIAM C. PROUT
NAME

Witness: /s/ EDWARD P. MONAGHAN

Investigator IPS
Official Capacity